



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

Youichirou SUGINO et al.

Confirmation No.: 9498

Serial Number: 09/882,671

Group Art Unit: 1774

Filed: June 15, 2001

Examiner: DICUS, TAMRA

For: POLARIZER, POLARIZING PLATE, AND LIQUID CRYSTAL DISPLAY USING
THE SAME

Atty. Docket No.: 020581

Customer No.: 38834

DECLARATION UNDER 37 C.F.R. 1.132

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

I, Youichirou SUGINO, a citizen of JAPAN, hereby declare and state unequivocally:

1. I am Chief Researcher at the Development Section of Product Engineering
Department in the Mobile Planning and Management Center of the Optical Related Products
Division at Nitto Denko Corporation.

2. I joined Nitto Denko Corporation in April 1998. I was assigned to the Engineering
Plastics Division at Nitto Denko Corporation from April to October 1998, then to the Optical
Related Products Division at Nitto Denko Corporation in October 1998.

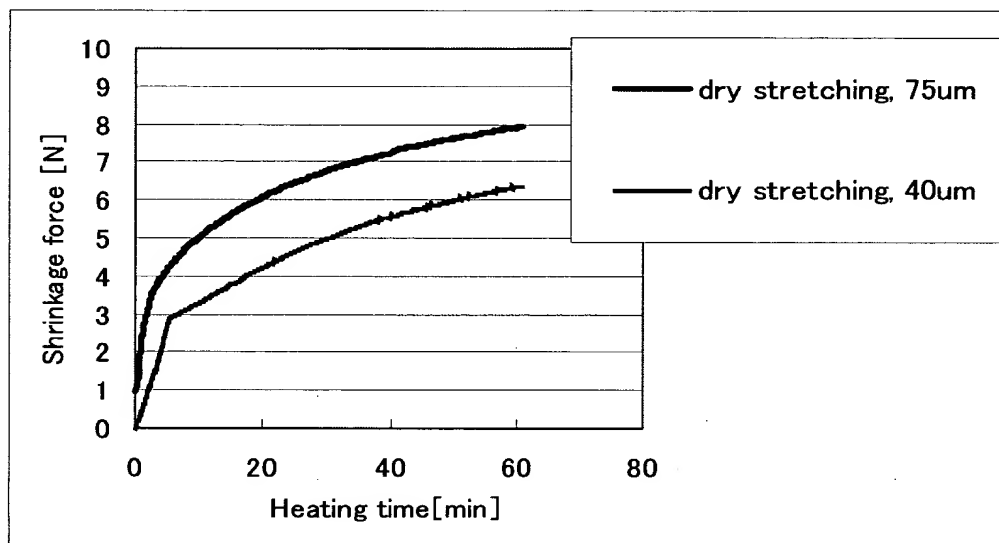
3. I graduated from the Department of Applied Chemistry of the Faculty of Engineering
at Nagoya Institute of Technology in March 1998.

4. I am the first-named inventor in the present application.

5. The following experiments were made by me and/or under my supervision:

6. Method for obtaining a polarizer by dry-stretching: A polarizer was obtained by: subjecting to a dry uniaxial stretching between 105°C rollers so as to be 4 times its original length; dipping in a bath containing iodine and boric acid while maintaining its tensile force; and drying. The shrinkage force of the polarizer was measured in accordance with the method as described in the present application. Polyvinyl acetate films having various thickness were stretched according to the above method, and the shrinkage force was measured.

7. Experimental results: The shrinkage force measurements are reported below:



8. Thus, the shrinkage force, as measured by heating the polarizer at 80°C for 30 minutes, and subsequently measuring the shrinkage force of the polarizer alone, was about 7 N/cm when a film having a thickness of 75 microns had been stretched, and about 5 N/cm when a film having a thickness of 40 microns had been stretched.

9. This data shows that dry-stretching of a hydrophilic polymer film results in a high

shrinkage force, well above the requirements of the invention in the present application.

10. I conclude that it is highly unlikely that a modification of a dry-stretching method of the films described above could reduce the shrinkage force to at most 4.0 N/cm as measured in accordance to the present application.

The undersigned declares that all statements made herein of his/her own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under § 1001 of Title 18 of the United States Code and that willful false statements may jeopardize the validity of the application or any patent issued thereon.

Date: February 20. 2006

Signature: Youichirou Sugino
Youichirou Sugino